

## **Notes from URGWOM Steering Committee Meeting; November 8, 2001; 10:00 AM; Corps of Engineers Conference Room, Albuquerque**

### *In attendance:*

Cyndie Abeyta, USFWS

Nabil Shafike, NMISC

Steve Bowser, USBR

Gail Stockton, Corps

Lawrence Cata, San Juan Pueblo

Leann Towne, USBR

Ellen Dietrich, SAIC/Corps

Jack Veenhuis, USGS

Don Gallegos, Corps

Tim J. Ward, UNM

Bill Miller, WJM Engineering, Inc.

Dave Wilkins, USGS, URGWOM Technical Team

Dennis Oyenque, Pueblo of San Juan

- ❖ Leann Towne presented information on the Bureau of Reclamation's San Juan-Chama (SJC) water accounting.
  - Originally, the USBR kept daily paper notes on every reservoir in the "Green Book" to document reservoir changes and what water was moved. Then, before URGWOM, water managers used a FORTRAN "Daily Program" that required a great deal of data entry, with a high potential for errors.
  - With the use of URGWOM, the USBR compared outputs to the Daily Program for 2 to 3 years and determined that they were similar. Currently, they are not using the Daily Program, but still keep notes in the Green Book to document why decisions were made.
  - Monthly reports that are sent to contractors include information such as total storage, losses, and the amount of SJC water by contractor in each reservoir. USBR staff is working on using URGWOM to generate reports more frequently.
  - Annual reports include summaries of the monthly reports, with any corrections needed.
  - URGWOM has made it easier for the operations staff to know what water is in which reservoir on a given day.
  - Quality control is an ongoing problem because there is still room for error, even with the use of URGWOM.
    - Spreadsheets have been developed to take the URGWOM output and generate a report, but the spreadsheet program is still being debugged.
    - There is the potential for error during entry of inputs to URGWOM.
    - Nambe is not currently modeled in URGWOM, so data from that reservoir requires as much time as all of the others combined. A future URGWOM enhancement would be to add Nambe.
    - They have begun developing a Quality Assurance/Quality Control Plan to minimize the number of errors and develop a procedure that ensures consistency of data handling and quality.



- The USBR water operations staff is developing a web site that will have monthly reports and links to reservoir and gage data. The site should be available within the next month.
  - Leann was asked if historical accounting data will be posted on the web site. She responded that the raw data is not public information. Only the reports derived from the data will be posted.



- **When the web site is up and running, Leann requested that the Steering Committee send her comments.**

- ❖ Dave Wilkins reviewed the status of URGWOM development and Technical Team activities. The summary he handed out is attached to the end of these notes.
- ❖ Steve Bowser attended the last WaRSMP meeting to discuss strategies for developing the database. He will be reviewing linkages between DMI and DSS in early December. The Bureau of Reclamation has a server for HDB that needs to be set up.
- ❖ Jack Veenhuis reported that he developed a sample report using MMS for the SJC to the mouth. . Steve Markstrom (USGS) Doug Boyle (DRS) and Roberta Ball are working on MMS-DSS-URGWOM interface. MMS in the northern part of the basin should be ready for use to develop the next Annual Operating Plan.
- ❖ Gail Stockton contacted all of the agencies that supplied original data for URGWOM to ensure that they had no objections to posting the data on the URGWOM web site in December. All of the agencies responded, but a few wanted to consider the request further before giving permission.



- ❖ **The next URGWOM Steering Committee meeting will be held on December 13 at 10:00 a.m. in the Corps conference room.** Suggested presentations include one on the interface between MMS and DMI from Steve Bowser and Roberta Ball, and Mark Yuska's presentation on URGWOM that he is giving to AWRA.

#### **URGWOM TECHNICAL TEAM ACTIVITIES—DAVE WILKINS**

- The RiverWare accounting model for 1994 is verified for Heron, El Vado, Abiquiu, Cochiti, Jemez and Elephant Butte Reservoirs. The 1994 model results do not match the annual report because of greenbook errors that were not found before model runs. In 1994 different sediment calculation methods were used and the different equations create some differences when comparing annual report and model results.
- CADSWES provided a second update of the RiverWare code for a method to calculate "riparian ET" and river leakage. Carole Thomas tested the new code and found a mistake in the original logic that occurs in the lower reaches when the direction of river leakage is toward the river. The team has discussed changes and sent a memo to CADSWES requesting further refinement of the method.
- Changes were made to the wastewater metadata files in response to a request from Cathy Bius, USEPA.
- Additional pan evaporation data (year 2000, and 1975-88) for Caballo Reservoir was requested from Javier Grajeda, USBR, El Paso. All data was supplied except that between 1975-79, which is not available.
- Developed rules on Rio Grande Compact computations that can be included in the Accounting, WaterOps and Planning models. Need to coordinate with Nabil and incorporate into El Vado operations rules.



- Making sure that San Juan Account data verified in the Accounting model (1995, 1996 and 2000) are in the database correctly.
- Waiting for a couple of bug fixes and new methods (expected within a week or so) to begin developing the Planning model.
- Worked a couple of weeks on Corps Water Management System (CWMS). Reservoir Control has to implement CWMS in mid-June, so a portion of Marc Sidlow's time will be devoted to that project.
- Developing a reservoir simulation model for Trinidad Lake (Arkansas River Basin).
- Calibrating the river leakage program. There seems to be some river and drain elevation problems that do not allow calibration with reasonable hydraulic conductivity values.
- Checking some basic RG Compact Accounting in Accounting Model.
- Gail has called and received responses from all data sources.
- The layout of the big, all-inclusive document has been discussed but no decision has been made.
- USBR Water Ops staff will be trained on the Water Ops model in December.
- Mark's presenting at AWRA conference in Albuquerque 11/13/01.
- Team members are formulating presentations at the Hydrologic Modeling Conference in Las Vegas, Late Jul-Early Aug 2002.
- A meeting with Steve Markstrom (USGS) and Roberta to work on the RiverWare-MMS-DSS linkages has been scheduled for November 26-30,01 in Albuquerque.